

Criminal Database Application

Java

Code Gods

Colin Sandman
Daniel Baker
Kevin Nguyen
Andrew Stokes

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Table of Contents

1. Introduction
2. Stakeholders
3. Constraints
4. Overall Description
5. Business Use Cases
6. Functional Requirements
7. Non-Functional Requirements
8. Definitions and Acronyms
9. Competitive Analysis
10. References
11. Appendices

Introduction

The application being constructed is a database that will record and store the crime and details of criminals. The database will allow policemen to keep track of criminals by recording certain details about the person and crime such as their appearance and facial features. Using the database will allow policemen to track past and future crimes based on similar actions and trends that can be shown by the database. The details of the criminal can be used to create a list of suspects in future crimes while matching criminals to their crimes. Since there currently is not a form of this database, by creating this will allow policemen to have a way to store data of past criminals and also record data on future criminals. Providing officers with an organized and easy to use application to look back on when needed.

Stakeholders

Greg Heffley

age: 35

residence: Minnesota

education: College Degree in Business

occupation: Employee at Dunbar Mifflin

marital status: Married



I always make sure to hire qualified employees

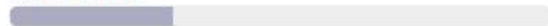
Usually spends his day at the office with his other co-workers getting assignments and projects done as smooth and efficient as possible. If outside the office, he spends time with his wife and 2 kids at home.

Comfort With Technology

INTERNET



SOFTWARE



MOBILE APPS



SOCIAL NETWORK



Criteria For Success:

Being able to get a task done properly and efficiently.

Needs

- Always makes sure he is working with appropriate and capable staff.
- Always is on time and never late to anything whether work or going out.
- Always has time to his family and kids.

Values

- Honesty and Respect is #1.
- Always making sure that you work as hard as you can, whether at work or on a personal task.

Wants

- Wanting to be able to travel with his family.
- Being able to never worry about finances and money.
- To always have a safe environment for work for his co-workers.

Fears

- That he will get a task done late, or is late to anything on a timed schedule.
- That he hires incapable people for the job or people with past criminal records than do not qualify for certain jobs.
- That he isn't ever disliked by anyone.

Martha Johnson

age: 43
 residence: Massachusetts
 education: JD
 occupation: Prosecutor
 marital status: Married



"I want to ensure my clients get the closure they deserve."

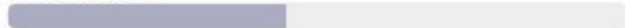
Martha spends a majority of her day at work. When she gets home, she helps her kids with homework, helps her husband clean up after dinner, and makes sure everything in the household is going smoothly. On the weekends, she has to take her daughter to piano lessons, and her son to soccer practice. She wastes no time and gets as much done as possible whenever she can.

Comfort With Technology

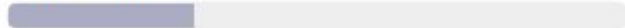
INTERNET



SOFTWARE



MOBILE APPS



SOCIAL NETWORK



Criteria For Success:

Needs to be able to get as much done as efficiently as possible, but can't cut corners.

Needs

- Needs a system that works fast
- Needs a system that isn't too technical; Easy to use, but still containing the features she needs
- Needs a system that is fast, she can't spend too much time on using the product

Values

- Time
- Respect

Wants

- The ability to find related persons to a suspect
- Advanced Search Features
- ID System

Fears

- That she persecutes the wrong suspect
- A case goes unclosed or the client is unsatisfied

Mike Stevens

age: 32

residence: Idaho

education: College degree in Criminal Justice

occupation: Police Officer

marital Married

status:



"I hope to keep the neighborhood safe for my family and friends."

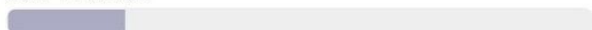
Spends 6 days a week driving around in his jurisdiction, responding to calls as needed. At night, he loves spending time with his wife. He does not have any kids, but one day hopes to have a couple kids with his wife, Danielle.

Comfort With Technology

INTERNET



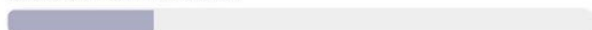
SOFTWARE



MOBILE APPS



SOCIAL NETWORK



Criteria For Success:

Tracking down criminals and keeping them off the street.

Needs

- Has time to himself at the end of the day to relax with his family.
- Wants to make sure the police force is always doing the right thing for the community.
- For everyone to feel safe walking down the street.

Values

- Safety
- Justice
- Keeping rules in order

Wants

- A way to search for criminals using images to potentially stop crimes before they happen.
- Being able to look at crimes related to break-ins and car thefts.

Fears

- That he will be killed or critically injured while on duty.
- The bad cops in the force that will make horrible mistakes.

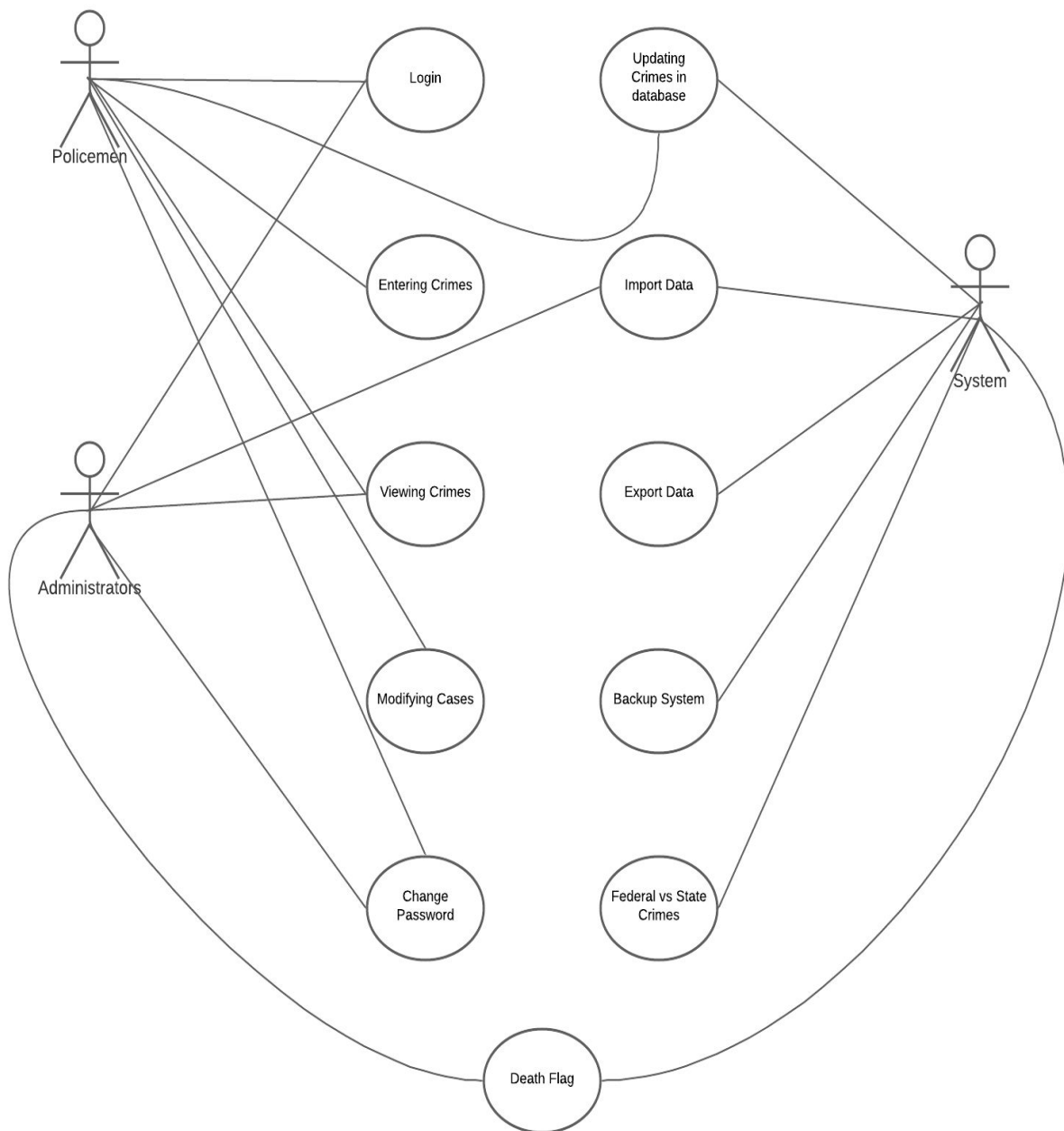
Constraints

At the moment there are currently no major constraints that are being applied to the application. Once meeting with the client the team will be able to understand the requirements of the application and implications that the client wants to request the application provides. While at the moment there is time constraint in which the application needs to be constructed by the end of the spring 2021 semester. While not being provided a budget we will be constructing this application using free software.

Overall Description

This database will be designed and created with the programming language java. A computer will be used to run this application and will also store the data that is provided. Using the programming language java the application will also be able to be used in major operating systems such as Microsoft Windows and Linux. This will allow the users and the clients of the application to use this application from their home and also their workplace with any type of computer.

Business Use Cases



Functional Requirements

Our functional Requirements have be placed in this google sheets:
<https://docs.google.com/spreadsheets/d/1Uc6SxlvagK-ofkweNiYgB2Ut0yn1P6v3qxow9XTgoU4/edit?usp=sharing>

These requirements range from logging into the system, entering data, viewing crimes, modifying cases, and many many more.

Non-Functional Requirements

Our system shall require a high end security system. This will include having a strong password, backing up the system every 12 hours, and changing passwords every 6 months. The system shall also be usable to any person, meaning the interface should be easy to look at and anyone who uses it can use it with ease. The system also will constantly update the system to add/remove features at admins please. This will help policemen who want new features to be added to the system, however will not be an open end system. Our system shall also be only used in java, no other language is allowed in the program.

Definitions and Acronyms

Database - What the system uses to store crimes when entered

Java - The coding language used in the software

Stakeholders - People that could use our product

System - This is the program side of things that holds the database

Implications - A conclusion that can be drawn from something

Competitive Analysis

Agnovi

<https://www.agnovi.com/criminal-intelligence-database-software/>

Review Conducted by: Colin Sandman

Investigation: 2005-0001, Project Scorpio — User: Andrea, Todd


File Edit Investigation Perspective Tools Help

Investigation Entities Events Evidence Charts Admin

Entities

| Description 1 | Description 2 | Role |
|---------------------|---------------|-----------------|
| AKPN199 | Ontario | Subject of Inte |
| AKUR146 | Ontario | Subject of Inte |
| ANR 386 | Ontario | Subject of Inte |
| Wave Skimmer | CA-6543 | Subject of Inte |
| Bank of Hong Kong | Business | Subject of Inte |
| Continental Packing | Business | Subject of Inte |
| DMG Imports | Business | Subject of Inte |
| Mohawk Casino | Business | Subject of Inte |
| wcrowe@hotmail.com | E-mail | Subject of Inte |
| 987-5943 | Business | Subject of Inte |
| Ball | Frank | Subject of Inte |
| Bergman | Tim | Subject of Inte |
| Bourke | Shane | Subject of Inte |
| Chen | Jacky | Subject of Inte |
| Crowe | Wally | Subject of Inte |
| Maxwell | James | Subject of Inte |
| Morris | Karlo | Subject of Inte |
| Mueller | Barry | Suspect |
| Mueller | Katie | Subject of Inte |
| Mueller | Michel | Subject of Inte |
| Rancat | William | Subject of Inte |
| Ryan | Kevin Patrick | Witness |
| Ika | Thrah | Subject of Inte |

Gender: Male
 Birthdate: 1956-02-20 (Age: 50)
 Race: White
 Race Remark: —
 Height: 5 ft 7 in or 170 cm
 Weight: 163 lbs or 74 kg
 Build: Slim



Person

Surname: Mueller
 Given Names: Barry
 Gender: Male
 Birthdate: 1956-02-20 Age: 50
 Race: White
 Race Remark:
 Citizenship: US United States
 Birthplace: Detroit Michigan

Physical Description

Date: 2005-01-15
 Height: 5 ft 7 in or 170 cm
 Weight: 163 lbs or 74 kg
 Apparent Age: 55
 Build: Slim
 Complexion: Medium
 Eye Colour: Green
 Hair Colour: Brown
 Hair Type: Straight

Also Known As

| Name | Type |
|---------------|--------------------|
| Bary Mueller | Alternate Spelling |
| Larry Mueller | Alias Name |
| Slim | Nick Name |

Distinguishing Features

| Type | Description |
|-------------|----------------------|
| Behavioural | Frequents Casinos |
| Physical | Bushy gray sideburns |
| Physical | Walks with a limp |
| Vocal | Stutters |

Select the Relationship Chart tab

Details Ids/Contact Attachments/Notes Relationships Relationship Chart Time Stamp

Entities: 30 Items New - Tasks: 3, Notices: 1

Advantages

- Able to Record data and identify patterns and trends
- Search subject by name, identification, and physical description
- Reduce the time spent actually recording the data into the database
- Able to record birthdate, gender, age, height, and all shown in the picture

Disadvantages

- Software is out of date
- Organization of software is not as organized as needed to be
- Not able to have multiple investigations opened at once
- Only allowed up to 10 connections to the suspect in the software

Overall

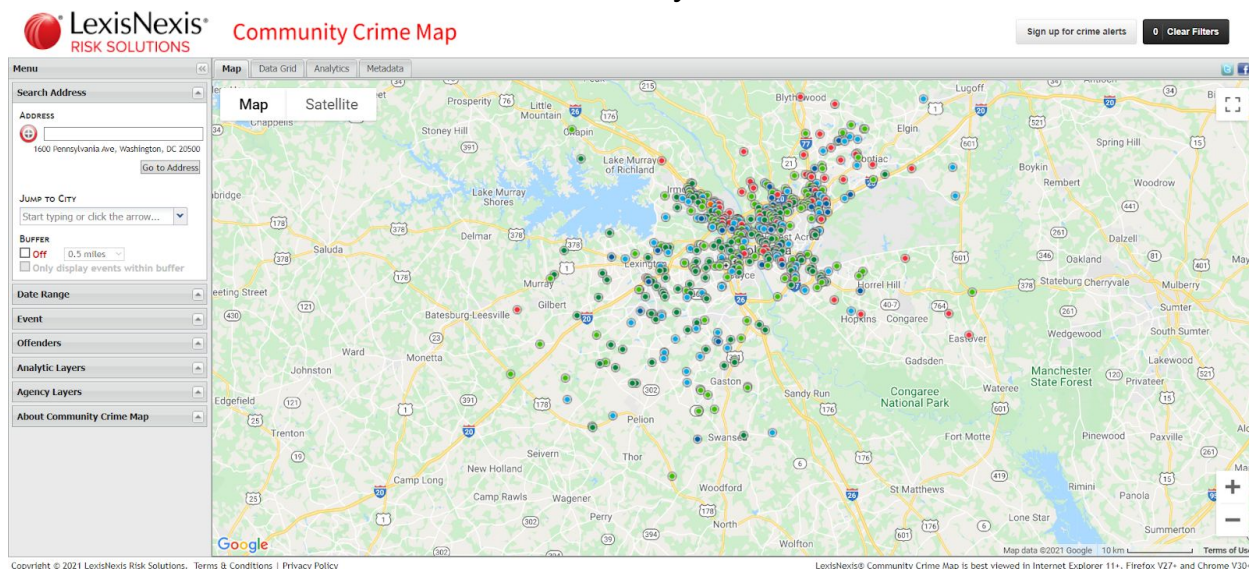
Overall, this idea of a software is really good. It allows the user to see what cases they are working in and also see all cases that are happening. They are also able to add in cases that they are working on. For example, they can enter the users height, weight, eye color, appearance, etc. They have drop down boxes for certain things that they want to add about the user they are entering. One of their best features is that there is a tree system that can connect them to certain clues or cases that have happened based off of the data you enter about the user and other crimes and users entered in the past. This algorithm is what functions this system so well. I think with all of this in mind, this is a great competitor and we will have to find a way to make our software better than theirs, and be able to do more than they could do.

Accurant Crime Analysis

<https://rb.gy/n1fyne>

<https://communitycrimemap.com>

Review Conducted by: Daniel Baker



Advantages

- Create, Schedule, and share reports with other users.
- Richness of information
- Suite of Applications, Map allows for easy finding of cases and the location they happened in
- Map works in browser

Disadvantages

- Somewhat confusing to use for the untrained person
- Map site is a little bit wonky, I would imagine it would be hard to use on mobile or on the go
- Not very good for individual cases, more so for monitoring areas, or getting details on an event itself rather than a specific suspect

Summary:

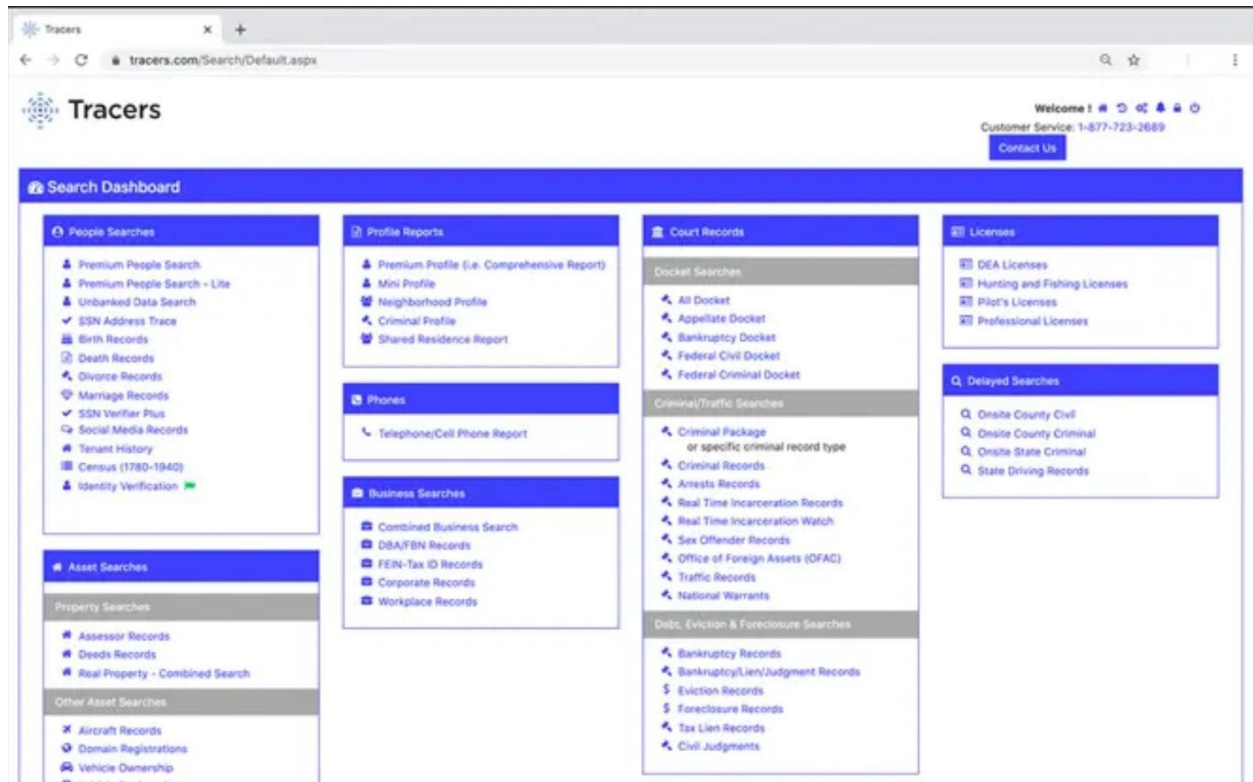
Overall, I like the idea of a map. It allows us to track specific cases and make them easy to find for the user, and allows them to also see where the crime took place. I think this would help make it to where if a case is dropped for some reason, the location and smaller details would still be in the system. However, if a map type system is created to complement the

database, we would greatly benefit from having it accessible on mobile devices. It would allow cops to get a quick analysis of the suspect on the fly, and keep an eye out for them. It would be crucial to getting a good product that has a use. The search features on the map product were also very robust, which was nice, and a feature that I liked is that each specific type of crime has a distinct bubble icon. This makes it easy to distinguish between crimes in a small area.

Tracers

<https://www.tracers.com/>

Review conducted by: Andrew Stokes



Advantages:

- Multiple search options, like deeds and licenses, as well as divorce records and vehicle records.
- Easy to use

Disadvantages:

- No share feature with others
- Hard to get access to the software
- Might be hard to get used to for a new user

Overall:

I like the program and how extensive it can be. The only issue is how difficult it is to get access to this program, so it would not be good for the common user, but for cops and lawyers, or private investigators, it would allow them to get extensive details on the subject.

References

Our Requirements Sheet -

<https://docs.google.com/spreadsheets/d/1Uc6SxlvagK-ofkweNiYgB2Ut0yn1P6v3qxow9XTgoU4/edit?usp=sharing>

Our Use Case -

<https://lucid.app/lucidchart/invitations/accept/09dc0419-0d74-475c-8b6e-191c4fbdcac1>

Our 30 questions from our client -

https://docs.google.com/document/d/1ccAtiFtwGBbWhWfQUvUSDVPZp_el_z6VVzdy593UYcY/edit?usp=sharing

Appendices

Agni Database, used as reference for certain ideas

<https://www.agnovi.com/criminal-intelligence-database-software/>

Used to understand the absolute basics of what is needed

<https://crimecenter.com/what-is-criminal-intelligence-database-software/>

Used to see what is out there already and see what features work

<https://www.capterra.com/law-enforcement-software/>